

PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing Traffic Control Signal with interconnect at the intersection of MD 117 and Great Seneca Highway in Montgomery County. The existing underground interconnect cable shall be maintained. The modification is necessary due to the addition of a northbound Great Seneca Highway right turn lane and the widening of the west leg of MD 117. MD 117 is assumed to run in an east-west direction.

II. INTERSECTION OPERATION

1. The intersection is to continue operating in a NEMA seven-phase, semi-actuated mode, with the MD 117 approaches running concurrently. The Exclusive/Permissive left turn phase for the westbound approach of MD 117 and the Exclusive left turn phases on both north and southbound Great Seneca Highway shall remain. The pedestrian phase with pushbutton actuation shall remain across the east leg of MD 117. The pedestrian phases across both legs of Great Seneca Highway shall remain on recall. The far-side sampling stations shall remain on both legs of Great Seneca Highway. The Great Seneca Highway approaches shall also run concurrently.
2. One (1) two-channel, time delay output loop detector amplifier shall be installed into the existing base-mounted cabinet.

III. SPECIAL NOTE

All field wiring to the existing controller cabinet shall be terminated to the appropriate controller cabinet connectors by the Contractor and labeled. All other controller cabinet wiring will be performed by the S.H.A. Signal Shop. Contact Mr. Ed Roderizer at (410) 787-7650 seventy-two hours in advance of intended work.

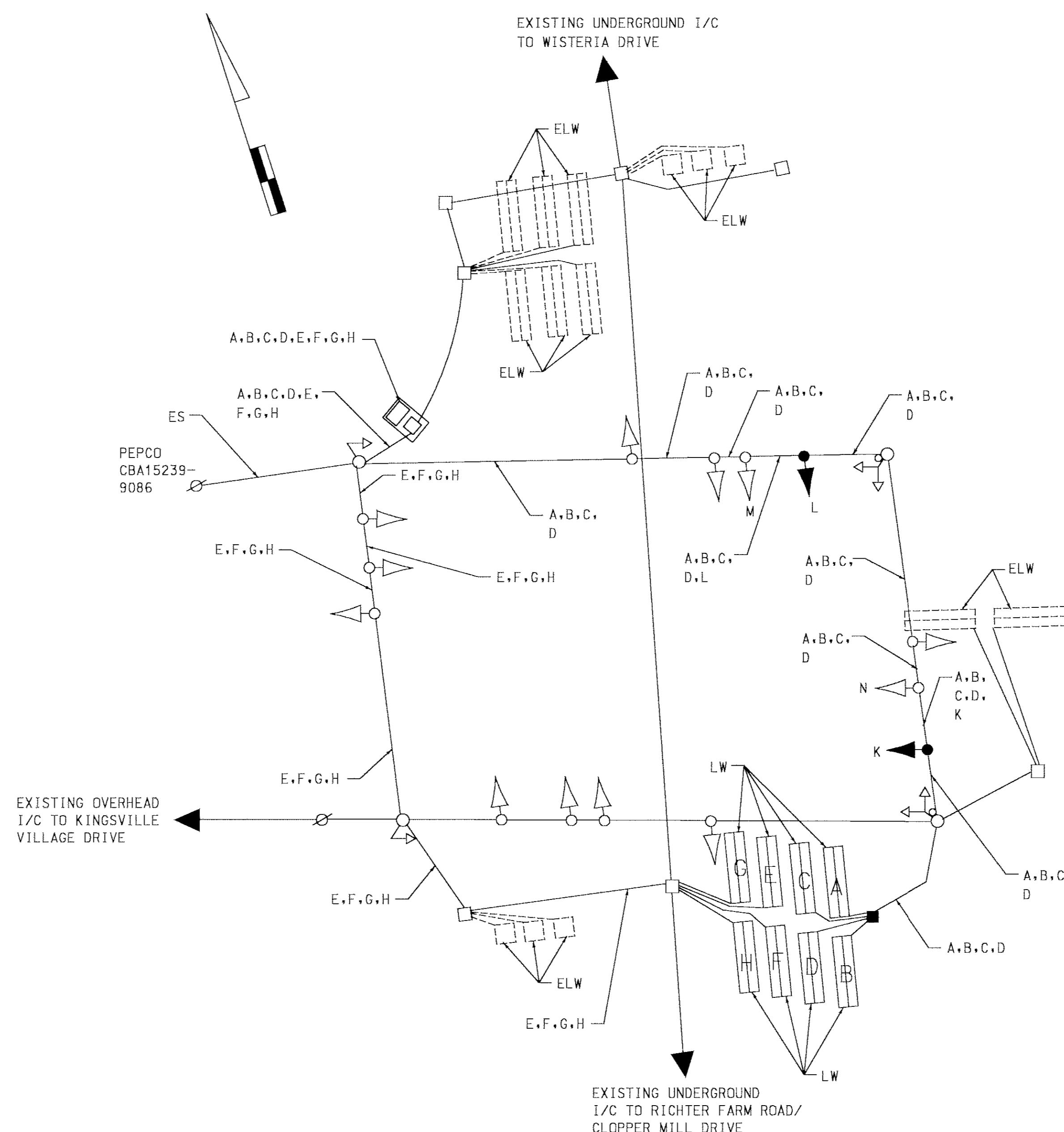
EQUIPMENT LISTS

A. EQUIPMENT TO BE SUPPLIED BY S.H.A.

SPEC.	QUANTITY	SECTION	DESCRIPTION
1 Each	863		2-channel, time delay output loop detector amplifier. (To be installed by S.H.A. Signal Shop Forces.)

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

SPEC.	QUANTITY	SECTION	DESCRIPTION
L.S.	106		Mobilization
L.S.	106		Maintenance of traffic.
150 S.F.	104		Temporary traffic sign.
15 U.D.	105		Flashing arrow panels.
170 L.F.	SP-555		Furnish and install thermoplastic pavement marking tape, white (12" width for crosswalks).
95 L.F.	SP-555		Furnish and install thermoplastic pavement marking tape, white (24" width for stoplines).
165 L.F.			Remove existing pavement marking utilizing grinder method.
715 L.F.	815		Furnish and install sawcut.
75 L.F.	805		Furnish and install 1" galvanized steel electrical conduit (detector wire sleeve).
20 L.F.	805		Furnish and install 1" liquid tight flexible non-metallic electrical conduit (detector wire sleeve).
45 L.F.	805		Furnish and install 2" polyvinyl chloride electrical conduit (Schedule 80) (trenched).
1 Each	811		Furnish and install handhole (frame and cover).
3105 L.F.	810		Furnish and install loop wire (No. 14 A.W.G.) encased in 1/4" flexible tubing.
2990 L.F.	810		Furnish and install 2-conductor electrical cable (No. 14 A.W.G.) (aluminum shielded).
110 L.F.	810		Furnish and install 5-conductor electrical cable (No. 14 A.W.G.).
2 Each			Relocate existing signal head.
2 Each			Relocate existing sign.
1 Each			Remove existing handhole.



WIRING DIAGRAM

WIRING KEY	
A B C D E F G H	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) (ALUMINUM SHIELDED)
K L	5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) TO BE SPLICED INTO EXISTING 5-CONDUCTOR CABLE
M N	EXISTING 5-CONDUCTOR CABLE TO BE UTILIZED
LW	LOOP WIRE (NO. 14 A.W.G.)
ELW	EXISTING LOOP WIRE (NO. 14 A.W.G.)
ES	EXISTING OVERHEAD SERVICE TO BE MAINTAINED BY PEPCO

NOTE: ALL EXISTING ELECTRICAL CABLE NOT SHOWN IS TO BE MAINTAINED

REVISIONS		APPROVALS		ASST. CHIEF TEC SECTION	ASST. DISTRICT ENGINEER, TRAFFIC	CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION	DIRECTOR, TRAFFIC & SAFETY	MARYLAND DOT - STATE HIGHWAY ADMINISTRATION Office of Traffic & Safety TRAFFIC ENGINEERING DESIGN DIVISION GENERAL INFORMATION MD 117 AND GREAT SENECA HIGHWAY
DRAWN BY:	THACKER	COUNTY:	MONTGOMERY					
CHECK BY:		LOG MILE:	15011708.06	T.I.M.S. NO.				
DATE:	2-26-99	F.A.P. NO.		SCALE:	N/A	S.H.A. NO.	D-193	